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(56) Documents Cited
GB 2277681 A
GB 2096460 A
WO 1997/038602 A2
FR 002585565 A
GB 2242357 A
WO 1998/011800 A1
DE 003138389 A
US 5664590 A

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(54) Abstract Title

Device for selective treatment of hair

(57) A re-usable device for selective treatment, eg dyeing or bleaching, of hair comprises two flexible impervious sheets 3,4 joined along a common edge 6 and having hook-and-loop fastening strips 1,2 along their other edges. One sheet 3 may be relatively stiff and opaque and bears the hook portion 1 of the fastening, into the hooks of which a lock of hair to be treated is drawn (Fig 4). The other sheet is more flexible and transparent. After applying the treating agent the sheets are joined by the fastening 1,2. Small projections 3 on one sheet serve to keep the two sheets slightly separated. Seams 5 form a trough in the region of the join 6 to retain fluid.

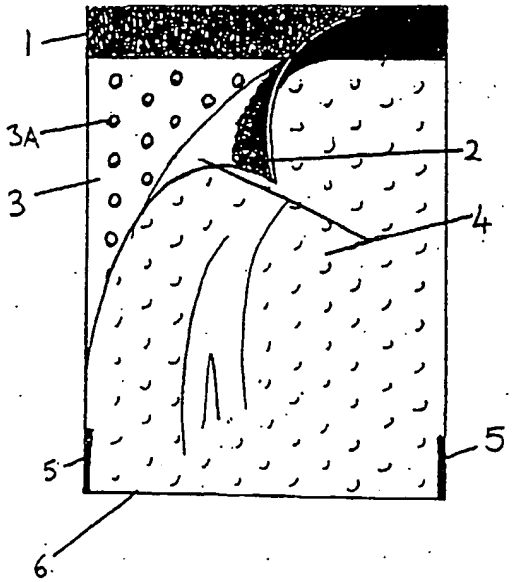

Fig 1

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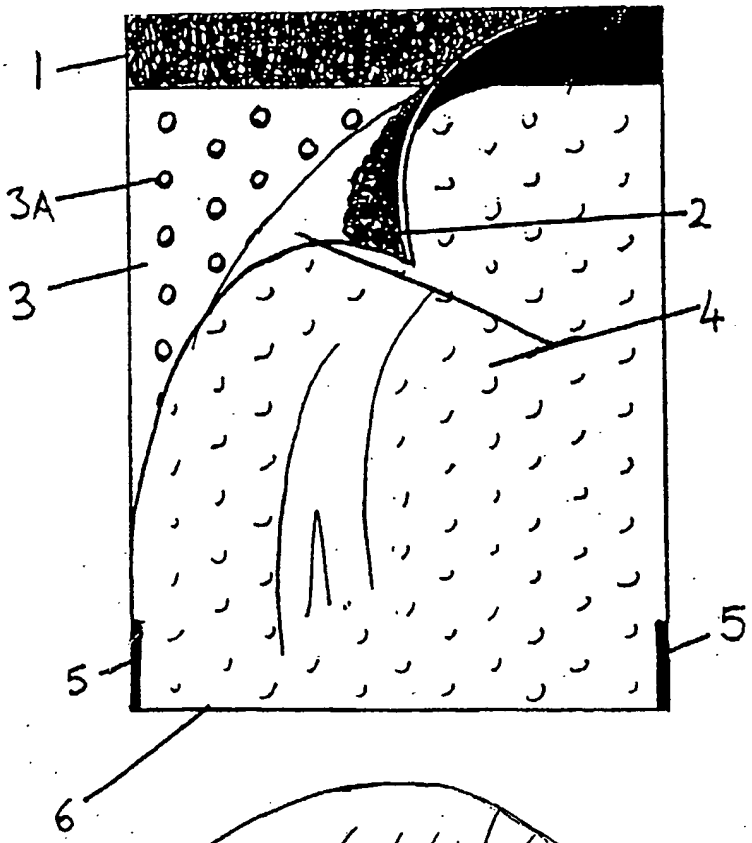


Fig 1

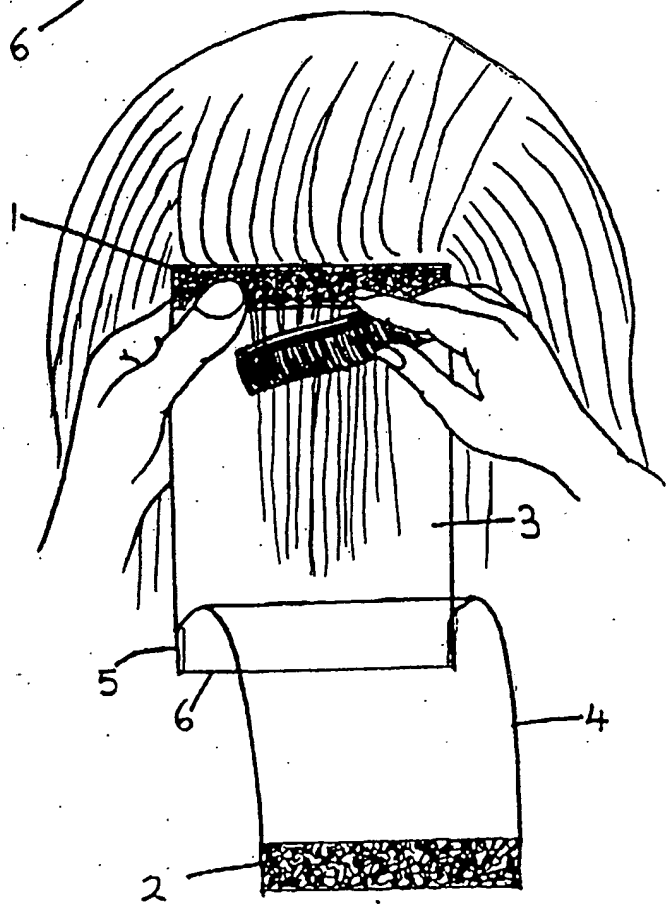


FIG 2

FIG 3

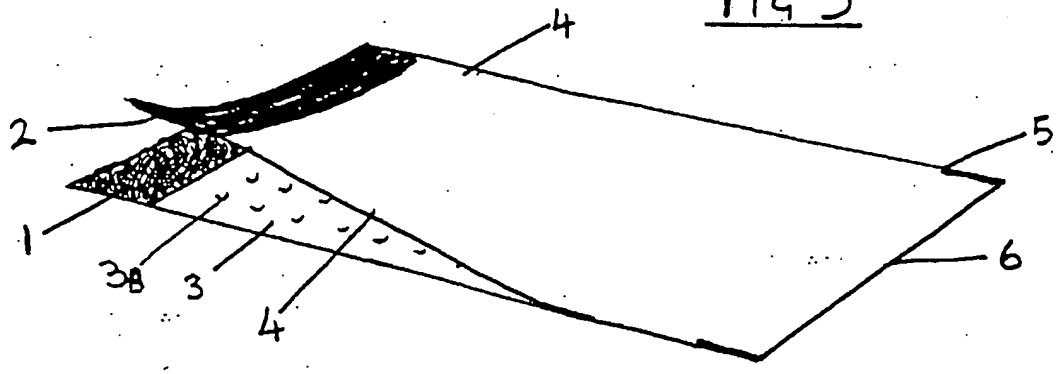
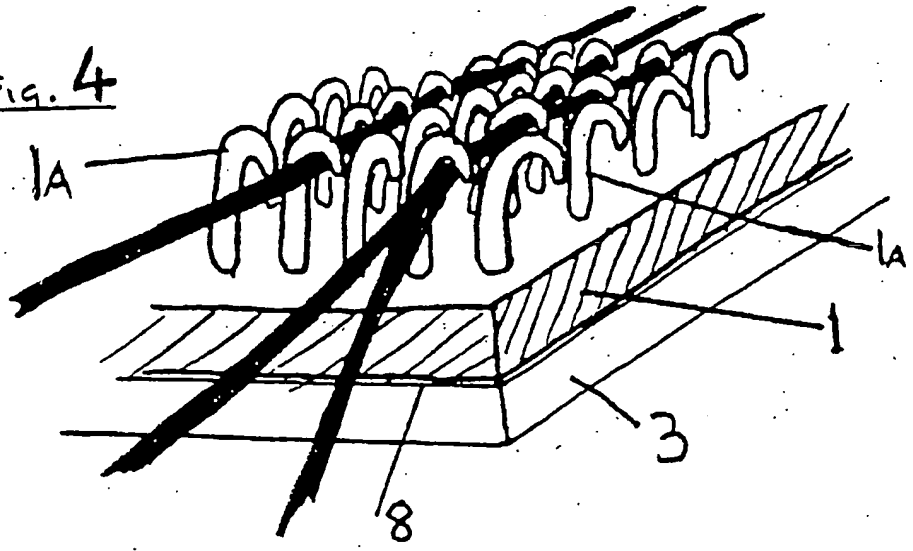


Fig. 4



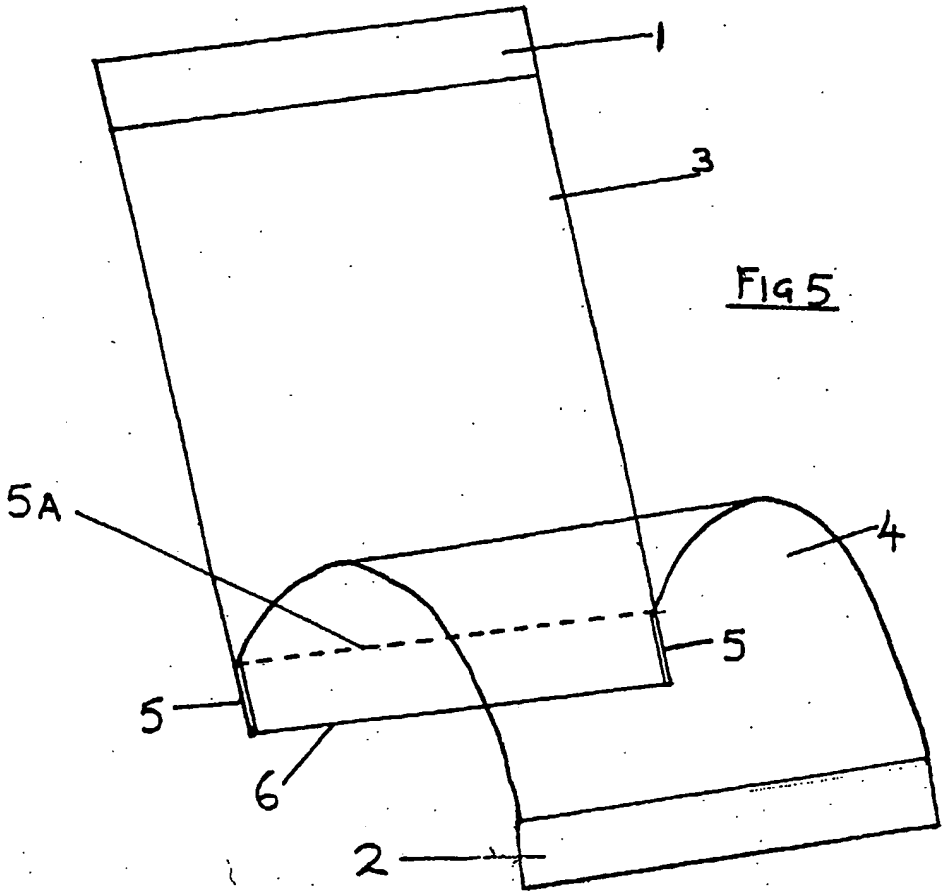


Fig 5

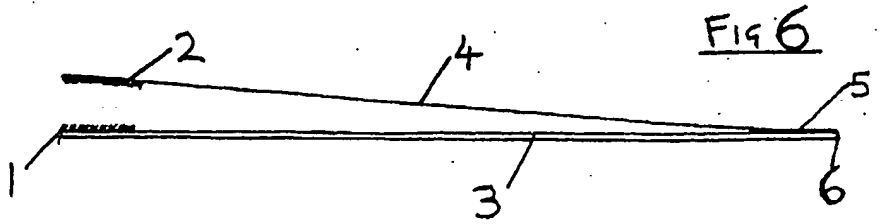


Fig 6

Description

This invention relates to a re-usable hairdresser's aid and, more particularly to a device for separating treated hair and the treatment process from unselected hair during the process of colouring or bleaching selected strands of hair.
Colouring or dying hair is a commonplace treatment in hair dressing salons. Likewise the selective colouring of portions of hair, known as highlighting or lowlighting, is often practised.

One of the methods used to achieve the high or lowlighted effect is to use a perforated cap. The perforated cap is placed on the subject's head and individual strands of hair are hooked out through the holes with a device similar to a crotchet needle. These strands are then treated with a colouring agent whilst separated from the main head of hair by the perforated cap which is later removed after treatment.

There are many disadvantages to using a perforated cap for the purposes of high or lowlighting. It can cause considerable discomfort to the person undergoing treatment either through wearing the tight cap or by the process of hooking hair through the perforations. Also the effectiveness of this operation is limited by the operator's inability to visually select strands of hair rooted near the perforations and thereby not colouring sufficient of their length. Also colouring agents can seep through the perforations contaminating areas of hair which are not intended to be coloured.

Another method of colouring or bleaching selected hairs is to select bunches of hair and wrap them in metallic foil in an attempt to separate the colouring process from the main head of hair.

This practise is impractical due to the time and trouble it takes to implements this process throughout a head of hair and due to slippage and seepage which can cause colouring agents to contaminate unselected hair.
The foil also masks the treated hair from view during the colouring process, making observation and monitoring of the colouring process, difficult.

There are a variety of clips available which in conjunction with polythene strips, sheets or envelopes, are used to shield hair selected for colouring from the main head of hair. The use of such methods can be intricate and time consuming for the operator

There are also disposable polythene sheets available with adhesive strips for attachment to strands of hair selected for colouring or bleaching. Colouring products can often seep from the sides causing contamination to unselected hair and the adhesive strips can lose their adhesive quality when in contact with colouring agents thereby causing slippage which can further lead to colouring agents contaminating unselected hair. Such products are designed to be disposable and being be wasteful and are not in conjunction with environmentally friendly practise.

The present invention relates to a device which eliminates the disadvantages of those previously listed and provides an efficient, easy to use, environmentally friendly method of colouring selected strands of hair shielded from a head of hair.

The re-usable device consists of 2 equal rectangular sheets sealed together along a common width edge, 6 of Figs 1-2-3-5 and 6, which are fixed at the opposite end by means of a hook and loop fastening strip joined widthways along the extreme opposite edge,1 and 2 of Figs 1-2-3 and 6.

The lower sheet, 3 of figs 1-2-3-5 and 6,is composed of an opaque non-porous polythene material to which the hooked portion, 1 of Figs 1-2-3-4 and 6,of the hook and loop fastening strip is fixed.

The upper sheet, 4 of Figs 1-2-3-5 and 6, is composed of an non-porous transparent polythene material to which is fixed the loop portion, 2 of Figs 1-2-3-5 and 6,of the hook and loop fastening strip.

The opaque polythene sheet, 3 of Fig 1,is pimpled, 3a of Fig 1,or dimpled, 3b of Fig 3,on its upper surface and is further joined to the upper transparent sheet, 4 of Figs 1-2-3-5 and 6,a short way along each side, 5 of Figs1-2-3-5 and 6,in conjunction with sealed edge,6 of figs 1-2-3-5 and 6, aforementioned.

The device may be opened and closed lengthways by fastening and unfastening the hook and loop fastening, 1 and 2 of Figs 1-2-3-5 and 6,which can be attached to selected hair of a head of hair.

The process of attaching this device to a head of hair is first partly achieved by selecting suitable hair by combing or weaving and then combing the selected hair over the lower portion of the hook and loop fastening. 1 of Figs 1-2-3 and 6, as illustrated in figure 2,thereby causing the strands of hair to be drawn over and hooked by the hooked strip of the hook and loop fastening arrangement, as illustrated in figure 4.

The hooks, 1a of Fig 4, cause the strands of hair to be both separated and firmly held as they are drawn over the hook portion of the hook and loop attachment, 1of Figs 1-2-3-4 and 6, as illustrated in Fig 2. The strands of hair may be further separated along their length by the inclusion pimples, 3a of Fig 1.

The colouring agent is applied to the selected hair prior to the upper sheet, 4 of Figs 1-2-3-5 and 6, being closed to the bottom sheet, 3 of Fig 1-2-3-5 and 6, and held in place by the hook and loop fastening, 1 and 2 of Figs 1-2-3-5 and 6.

The closing action of the hook and loop fastening, 1 and 2 of Figs 1-2-3-5 and 6, serves to further anchor the device to selected hair by constricting the selected hair between the loop portion, 2 of Figs 1-2-3-5 and 6, and the hooked portion,1 of Figs 1-2-3-5-and 6,and 1a of Fig 4.

Oxidation of the treated hair aids the treatment process. Oxidation is enhanced by the incorporation of pimples, 3a of Fig 1, or dimples, 3b of Fig 3, which allows air to circulate between the sheets, 3 and 4 of Figs 1-2-3-5 and 6, when they are in the closed position.

A gap caused by pimples, 3a of Fig 1, or dimples, 3b of Fig 3, also serves to prevent the upper sheet, 4 of Fig 1-2-3-5and 6, from sticking or maintaining too close a contact with the lower sheet, 3 of Figs 1-2-3-5 and 6, thereby preventing seepage from the sides by allowing liquid to drain gravitationally downward into the trap, 5 of Fig 1-2-3-5 and 6.

The liquid trap, 5 of Fig 1-2-3-5 and 6, at the base, 6 of Figs 1-2-3-5 and 6, serves to accommodate excess liquid thereby preventing seepage from the sides along the line of the lower edge, 6 of Figs 1-2-3-5 and 6.

The lower sheet, 3 of Figs 1-2-3-5 and 6, being of less flexible material than the upper sheet, 4 of Figs1-2-3-5and 6, provides a firmer surface against which the selected strands of hair and the upper sheet, 4 of Figs1-2-3-5 and 6, are supported.
A version without pimples or dimples, 3 of Figs 2 and 5, may be encompassed within the design of this device.

Illustrations

Figure 1: Shows the device in it's entirety with upper sheet, 4, and the attached hook and loop fastening strip, 2, drawn back revealing the lower sheet, 3, with pimples,3a, and the lower portion of the hook and loop fastening, 1.

Figure 2: Shows the device in position during the process of the colouring treatment.

Figure 3: Shows the device sideways with the upper sheet lifted to illustrate dimples, 3b,on the lower sheet.

Figure 4: Shows the hooking process with which the hooked portion,1a, of the hook and loop fastening, anchors and separate selected strands of hair.

Figure 5: Shows the liquid trap at the base of the device with a fragmented line demonstrating the upper limit of the trough.

Figure 6 : Shows a side view of the device.

Claims

1. A re-usable device for use in the colouring or treatment of selected strands of hair, which shields the treated hair and the treatment process from the main head of hair. Comprising of 2 sheets of flexible impervious material sealed together along a common edge with hook and loop fastening strips attached at the opposite end.

2. A device as claimed in Claim 1 wherein the hook and loop fastening strip is used to anchor and/or separate selected strands of hair.

3. A device as claimed in Claim 1or Claim 2, wherein the whole of one sheet is less flexible than the other sheet.

4. A device as claimed in Claim 1 or Claim 3, wherein pimples are used to either separate selected strands of hair or promote the movement of air or liquid between two sheets.

5. A device as claimed in Claim 1 or Claim 3, wherein dimples are used to promote the movement of air or liquid between two sheets.

6. A device as claimed in any of the preceding claims wherein the 2 sheets are composed of different materials.

7. A device as claimed in Claim 3 and Claim 6, wherein the less flexible sheet is comprised of an opaque material.

8. A device as claimed in Claim 3 and Claim 7 wherein the more flexible sheet is comprised of a transparent material.

9. A device as claimed in Claim 1 wherein a sealed edge is extended at a right angle to form a trap at the base thereby enabling excessive liquid to drain without seeping.

10 A device as claimed in any one of the preceding claims wherein 2 sheets are joined together by a hook and loop fastening.

Amendments to the claims have been filed as follows

1. A re-usable device for use in the colouring or treatment of selected strands of hair, which shields the treated hair and the treatment process from the main head of hair, comprising of 2 sheets of flexible impervious material, with one sheet less flexible than the other, sealed together along a common edge with hook and loop fastening strips attached at the opposite end

2. A device as claimed in Claim 1 wherein the hook and loop fastening strip is used to anchor and/or separate selected strands of hair.

3. A device as claimed in Claim 1 or Claim 2, wherein pimples are used to either separate selected strands of hair or promote the movement of air or liquid between two sheets.

4. A device as claimed in Claim 1 or Claim 2, wherein dimples are used to promote the movement of air or liquid between two sheets.

5. A device as claimed in any of the preceding claims wherein the 2 sheets are composed of different materials.

6. A device as claimed in Claim 1 or Claim 5, wherein the less flexible sheet is comprised of an opaque material.

7. A device as claimed in Claim 1or Claim 6 wherein the more flexible sheet is comprised of a transparent material.

8. A device as claimed in Claim 1 wherein a sealed edge is extended at a right angle to form a trap at the base thereby enabling excessive liquid to drain without seeping.

9. A device as claimed in any one of the preceding claims wherein 2 sheets are joined together by a hook and loop fastening.

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Claims searched: ALL

Examiner: R E Hardy
Date of search: 17 April 2001

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.S): A4V (V14A6 V14B V14X)

Int Cl (Ed.7): A45D (19/00 19/02 19/18)

Other: Online : EPODOC,WPI,JAPIO

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
A	GB2277681 A	SERENO : See the Figures	1
A	GB2242357 A	NEWMAN : See the Figures	1
A	GB2096460 A	SMITH : See the Figures	1
A	DE3138389 A	MERGES : See the Figures	1
A	FR2585565 A	PERMA : See the Figures (ref 2)	1
X	US5664590 A	PLATEROTI : See the Figures	1,2,10,16
A	WO98/11800 A1	PALUMINO : See the Figures (refs 17.1, 17.2)	1
A	WO97/38602 A2	WAGNER : See the Figures (ref 2)	1

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